

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Currently Amended) A method of treating a neuro-degenerative disorder or a neuro-developmental disorder comprising the step of: contacting a neuropathic hippocampal neurons with an amount of an isolated nucleic acid encoding full-length TrkB or any mutant, variant, homolog, or fragment thereof having the same activity as said full-length TrkB, whereby said amount of said isolated nucleic acid is sufficient to increase the amount of full-length TrkB in said neurons compared to an untreated neuron neurons.

Claim 2. (Previously Presented) The method of Claim 1, wherein said nucleic acid encodes the amino acid sequence of SEQ ID NO: 2.

Claim 3. (Previously Presented) The method of Claim 1, wherein said nucleic acid comprises the nucleotide sequence of SEQ ID NO: 1.

Claims 4-12. (Canceled).

Claim 13. (Currently Amended). A method of treating a neuro-degenerative disorder or a neuro-developmental disorder comprising the step of:

contacting a neuropathic hippocampal neurons with an amount of a vector sufficient to alter the ratio of amount of full-length TrkB polypeptide to truncated TrkB polypeptide in said a neuron.

Claim 14. (Currently Amended) The method of Claim 13, wherein said vector comprises a nucleic acid ~~selected from the group consisting of a nucleic acid~~ encoding full-length TrkB, ~~a nucleic acid encoding anti-sense RNA for truncated TrkB, and a nucleic acid encoding full length TrkB and for anti-sense RNA for truncated TrkB.~~

Claim 15. (Original) The method of Claim 13, wherein said vector is selected from the group consisting of a virus and a plasmid.

Claim 16. (Original) The method of Claim 15, wherein said virus is selected from the group consisting of a herpesvirus, adenovirus, adeno associated virus, retrovirus, vaccinia virus, and canary pox virus.

Claim 17. (Cancelled)

Claim 18. (Previously Presented) The method of Claim 14, wherein said nucleic acid comprises a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2.

Claims 19-54. (Canceled)